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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,797	01/28/2004	William R. McIntire	56.0470DIV	4000
27452	7590	07/01/2005	EXAMINER	
SCHLUMBERGER TECHNOLOGY CORPORATION IP DEPT., WELL STIMULATION 110 SCHLUMBERGER DRIVE, MD1 SUGAR LAND, TX 77478			RIVELL, JOHN A	
		ART UNIT		PAPER NUMBER
				3753

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/766,797	MCINTIRE ET AL.
	Examiner John Rivell	Art Unit 3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 11/19/04 (Reg for Recon.).
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 39-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 39 and 43 is/are rejected.
- 7) Claim(s) 40-42 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

Claims 1-38 have been canceled. Claims 39-43 remain pending.

Applicant's arguments filed November 19, 2004 have been fully considered but they are not persuasive.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 39 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowerman in view of King, Sr.

The patent to Bowerman discloses "a valve apparatus having a longitudinal axis therethrough, comprising: i) a valve seat member (5) that comprises a hollow bore and a first frustoconical contact surface (6); ii) a valve closure member (7) that comprises a body and a second frustoconical contact surface (8) that is adapted to seal against the first frustoconical contact surface (6), the valve closure member being movable along the longitudinal axis of the valve apparatus; iii) a fluid flow path through the bore of the valve seat member and between the valve seat member and the valve closure member, the fluid flow path being closed when the second frustoconical contact surface (8) is in contact with the first frustoconical contact surface (6); and iv) a reverse screening member (9, 10) that is attached to at least one of the valve closure member (7) or the

valve seat member and that screens particles from fluid passing through the fluid flow path in a reverse direction when the valve closure member approaches the valve seat member" as recited in claim 39.

Thus the patent to Bowerman discloses all the claimed features with the exception of having "a means to delay the valve closure while the reverse screening member is within a range of screening distances from the opposing frustoconical contact surface wherein the means to delay valve closure is a resilient screening insert which allows the passage of screened fluid until differential pressure across the valve deforms the insert to seal the valve, and further wherein the resilient screening insert comprises at least one protrusion from its contacting surface, and the one or more protrusions create a screening gap between the insert and the opposing frustoconical contacting surface when the valve closure member approaches the valve seat member".

This feature called for by the claim is directed to an element extending from the valve seat facing surface of a valve heads which initially prevents the valve from seating "until differential pressure across the valve deforms the insert to seal the valve". This feature is not exclusive to plural seating valves of the type claimed but can be found in any valve environment in which the function, e.g. no seating "until differential pressure across the valve deforms the insert to seal the valve" is desired.

The patent to King, Sr. discloses that it is known in the art to employ "protrusions 120 in figure 13, extending from the valve seat facing surface of a valve head cooperating with a valve seat 102 for the purpose of maintaining the valve head away from the seat and thus in an open position permitting fluid flow across the valve "until differential pressure across the valve deforms the insert to seal the valve". As an aside

the protrusion also forms a "gap" of certain size functioning to filter out particles larger than the "gap" size.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Bowerman "protrusions" extending from the "reverse screening member" 9,10 for the purpose of maintaining the valve head away from the seat and thus in an open position permitting fluid flow across the valve until differential pressure across the valve deforms the insert to seal the valve as recognized by King, Sr.

Regarding claim 43, in King, Sr., "the one or more protrusions (120) are of non-resilient material, and (in the device of the combination) the insert deforms over the protrusions to seal the valve" as recited.

Regarding applicants remarks concerning the above, the argument that "the Bowerman valve, the King valve, and the present valve are designed to solve three different problems in three different ways", the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the patent to King, Sr. discloses that it is known in the art to employ "protrusions 120 in figure 13,

extending from the valve seat facing surface of a valve head cooperating with a valve seat 102 for the purpose of maintaining the valve head away from the seat and thus in an open position permitting fluid flow across the valve "until differential pressure across the valve deforms the insert to seal the valve" in a manner very similar to that claimed.

Moreover, the argument that "King is not concerned with particles in the water or with the filtering out of particles; King's protrusions do not function that way because there are no particles present in the system in which King's valve is used" is certainly true in view of the written portion of the patent only. Such a position belies the functional characteristics of the structural elements shown and belittles the skill of one of ordinary skill in the art in recognizing the particular functions performed during certain situations. While the patentee King Sr. does not mention, in the written portion of the patent, particulate material within the fluid supplied, it is nor believed proper to refuse to acknowledge the potential for such.

Claims 40-42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Rivell whose telephone number is (571) 272-4918. The examiner can normally be reached on Mon.-Thur. from 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on (571) 272-4930. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John Rivell
Primary Examiner
Art Unit 3753

j.r.